

CENTRAL PNEUMATIC®

MINI ORBITAL SANDER

Model 93629

ASSEMBLY AND OPERATING INSTRUCTIONS



Visit our website at: <http://www.harborfreight.com>



Read this material before using this product.

Failure to do so can result in serious injury.

SAVE THIS MANUAL.

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For technical questions or replacement parts, please call 1-800-444-3353.

PRODUCT SPECIFICATIONS

Item	Description
Maximum Operating Air Pressure	90 PSI
Air Consumption	4.0 CFM @ 90 PSI
Air Inlet Size	1/4" - 18 NPT w/Filtration Screen
Free Speed	15,000 RPM
Sanding Disc Diameter	2"
Additional Features	90° Angled Head/Directional Side Exhaust Paddle Type Throttle/Hook & Loop Fastening Pad
Accessories	Fine Sanding Disc (Qty 1)/Medium Sanding Disc (Qty 1) Coarse Sanding Dist (Qty 1)/Wrench (Qty 1)
New Weight	1.55 lbs.


SAVE THIS MANUAL

You will need this manual for the safety warnings and precautions, assembly, operating, inspection, maintenance and cleaning procedures, parts list and assembly diagram. Keep your invoice with this manual. Write the invoice number on the inside of the front cover. Keep this manual and invoice in a safe and dry place for future reference.

UNPACKING

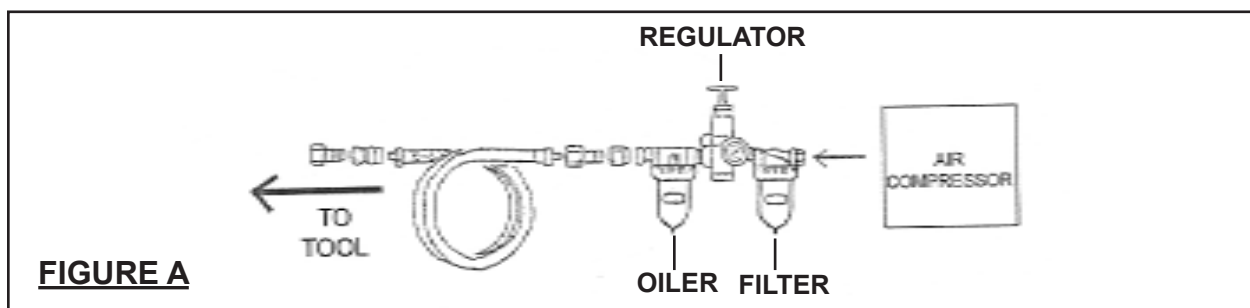
When unpacking, check to make sure that all the parts and accessories **listed on page 8** are included, and the product is intact and undamaged. If any parts are missing or broken, please call Harbor Freight Tools at the number shown on the cover of this manual as soon as possible.

SAFETY WARNINGS AND PRECAUTIONS

-  **WARNING! Use eye, breathing, and hearing protection.** Always wear ANSI approved safety impact goggles when using this Air Sander. Wear an ANSI approved dust mask or respirator. And wear ANSI approved hearing and clothing protection. Other people in the work area must also wear appropriate ANSI approved safety equipment.
- Keep work area clean.** Cluttered areas invite accidents.
- Stay within air pressure capacity.** Never operate the Air Sander above **90 PSI**. Only to be used as a Sander, not to be used as grinder. Never use with grinding disk.

4. **Observe work area conditions.** Keep work area well lit. Do not use pneumatic tools in the presence of flammable gases or liquids.
5. **Keep children away.** Children must never be allowed in the work area. Do not let them handle machines, tools, extension cords, or air hoses.
6. **Store idle equipment.** When not in use, tools must be stored in a dry location to inhibit rust. Always lock up tools and keep out of reach of children.
7. **Use the right tool for the job.** Do not attempt to force a small tool or attachment to do the work of a larger industrial tool. There are certain applications for which this tool was designed. It will do the job better and more safely at the rate for which it was intended. Do not modify this tool, and do not use this tool for a purpose for which it was not intended.
8. **Dress properly.** Do not wear loose clothing or jewelry as they can be caught in moving parts. Protective, electrically non-conductive clothes and non-skid footwear are recommended when working. Wear restrictive hair covering to contain long hair.
9. **Do not overreach.** Keep proper footing and balance at all times. Do not reach over or across running tools or air hoses.
10. **Disconnect air hose and release any built-up air pressure.** Never service the Air Sander or disassemble with the air hose attached. Always release any built-up air even after disconnecting hose. Disconnect the Air Sander when not in use.
11. **Remove adjusting wrenches.** Check that adjusting wrenches are removed from the tool and work surface before attaching to an air source.
12. **Avoid unintentional starting.** Be sure the Throttle (2) is in the **OFF** position when not in use and before plugging in. Do not carry any tool with your finger on Throttle, whether it is attached to an air source or not.
13. **Stay alert.** Watch what you are doing. Use common sense. Do not operate any tool when you are tired.
14. **Do not operate tool if under the influence of alcohol or drugs.** Read warning labels if taking prescription medicine to determine if your judgement or reflexes are impaired while taking drugs. If there is any doubt, do not operate the tool.
15. **Compressed air only.** Use clean, dry, regulated, compressed air at **90 PSI**. Never use oxygen, carbon dioxide, combustible gases, or any other bottled gas as a power source for this tool.

16. **Check for damaged parts.** Before using any tool, any part that appears damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment and binding of moving parts, any broken parts, and any other condition that may affect proper operation. Any part that is damaged should be properly repaired or replaced by a qualified technician. Do not use the tool if the Throttle does not operate properly.
17. **Replacement parts and accessories.** This product is to be repaired and serviced only by a qualified technician. When this product is serviced, only identical replacement parts should be used. Use of any other parts will void the warranty. Only use accessories intended for use with this tool. Approved accessories are available from Harbor Freight Tools.
18. **Maintenance.** The maintenance outlined in the “Maintenance” section should be performed regularly. For your safety, this product should be serviced or repaired regularly only by a qualified technician.
19. **Transport Air Sander safely.** Always disconnect air supply when moving the tool in the workplace. Carry the tool by the handle and avoid contact with the Throttle (2).
20. **Avoid working alone.** If an accident happens, an assistant can bring help.
21. For best service, you should incorporate an oiler, regulator, and in-line filter, as shown in the diagram below. Hoses, couplers, oilers, regulators, and filters are all available at Harbor Freight Tools. **NOTE:** If an automatic oiler is not used, put 3-5 drops of pneumatic Tool Oil (not included) in the tool’s quick connector before each use. **(See Figure A.)**

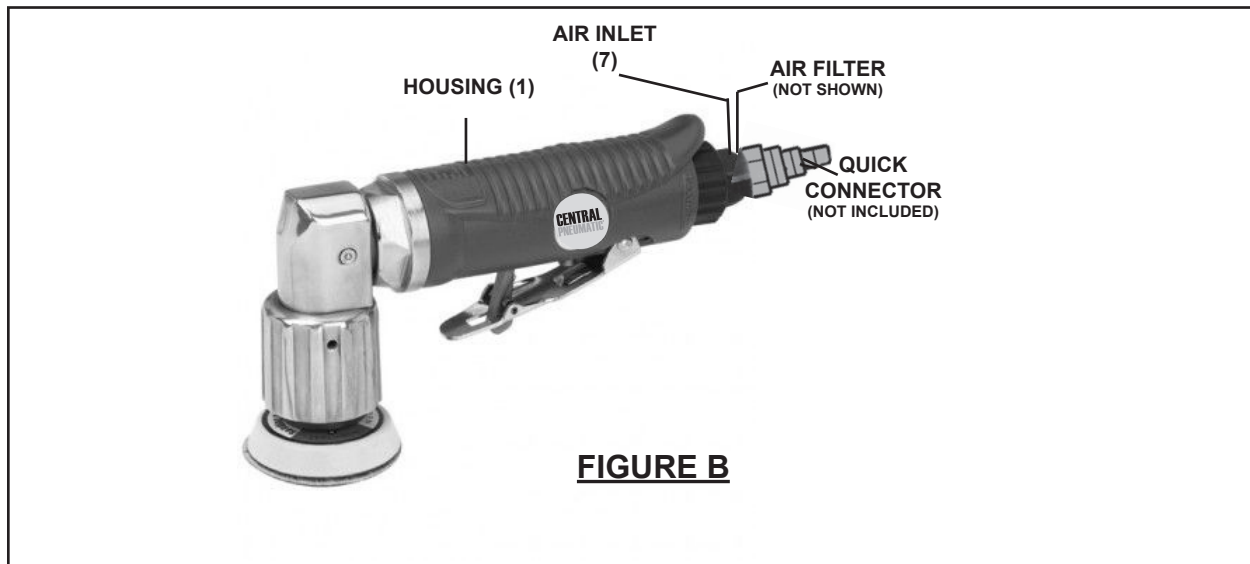


22. **⚠ WARNING!** Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contain chemicals known (to the State of California) to cause cancer, birth defects, or other reproductive harm. Some examples of these chemicals are: Lead from lead-based paints, crystalline silica from bricks, cement, and other masonry products, arsenic and chromium from chemically treated lumber. *(California Health & Safety Code § 25249.5, et seq.)*

23. **⚠ WARNING!** The warnings, cautions, and instructions discussed in this instruction manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.

ASSEMBLY INSTRUCTIONS

1. Prior to use, the Air Sander requires the attachment of a *Quick Connector* (not included) to its Air Inlet (7). To do so, make sure the screen Air Filter within the Housing (1) is properly seated in the Housing. Wrap approximately 3" of pipe thread sealer tape (not included) around the male threads of the Quick Connector. Then, firmly tighten the Quick Connector into the Air Inlet. **(See Figure B.)**




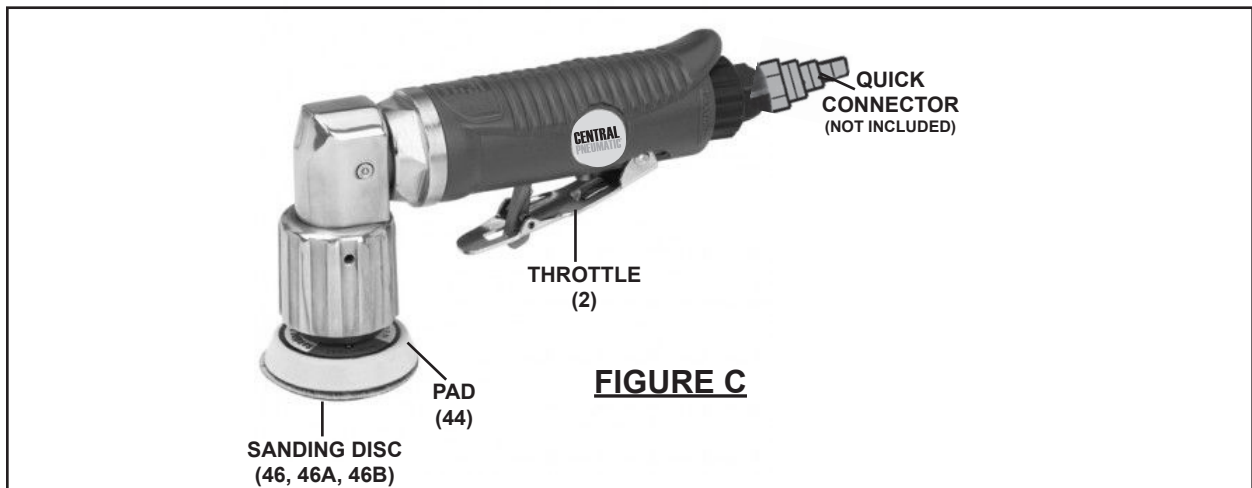
OPERATING INSTRUCTIONS

1. **⚠ CAUTION!** Whenever possible, secure smaller workpieces in a vise or with clamps (neither included) to avoid damage to the workpiece and/or personal injury.
2. Attach a 2" diameter, self-adhesive, Sanding Disc (46, 46A, 46B) to the Pad (44) of the Air Sander. **(See Figure C, next page.)**



Note: Do not use grinding wheels on this tool.

3. Make sure the Throttle (2) of the Air Sander is in its **OFF** (open) position. Then, connect an air hose (not included) to the previously installed Quick Connector of the tool. **(See Figure C.)**

4. Connect the other end of the air hose to the air compressor system. **(See Figure A, page 4.)**
5. Turn on the air compressor, and set its regulator to **90 PSI. Do not exceed 90 PSI.**
6. Grip the Air Sander firmly with **both hands.**
7. Select an area on the workpiece to be sanded.
8. Squeeze the Throttle (2) to turn on the Air Sander. Make sure the Sanding Disc (46, 46A, 46B) is not touching any surface before you turn on the tool. **(See Figure C.)**
9. Place the revolving Sanding Disc (46, 46A, 46B) on the workpiece surface. Then, move the Air Sander around the area to remove the residue. To increase the rate of revolutions (RPM) of the Sanding Disc, squeeze the Throttle (2) harder. To decrease the rate of revolutions, relax pressure on the Throttle. **(See Figure C.)**
10. Keep a light pressure on the Air Sander while in use. Do not apply heavy pressure, as damage to the surface area may result. **(See Figure C.)**
11.  **WARNING! Use eye, breathing, and hearing protection.** Always wear ANSI approved safety impact goggles when using this Air Sander. Wear an ANSI approved dust mask, face shield or respirator. And wear ANSI approved hearing protection. Other people in the work area must also wear appropriate ANSI approved safety equipment.
12. When finished using the Air Sander, release pressure on the Throttle (2). Turn off the air compressor. Squeeze the Throttle again to release any compressed air in the Air Sander. Disconnect the air hose from the tool. Then, store the Air Sander in a clean, dry, safe location out of reach of children. **(See Figure C.)**



INSPECTION, MAINTENANCE, AND CLEANING

1.  **WARNING!** Prior to performing any inspection, maintenance, or cleaning of the Air Sander, make sure to disconnect the air hose from the tool. Then, squeeze the Throttle (2) again to release any compressed air in the Air Sander.
2. **To clean the exterior of the Air Sander**, wipe with a clean, damp cloth using a mild detergent or mild solvent. Do not immerse the tool in liquids.
3. **When storing**, always store the Air Sander in a clean, dry, safe location out of reach of children.
4.  **CAUTION!** All maintenance, service, and repairs not mentioned in this manual must only be performed by a qualified service technician.

PLEASE READ THE FOLLOWING CAREFULLY

THE MANUFACTURER AND/OR DISTRIBUTOR HAS PROVIDED THE PARTS LIST AND ASSEMBLY DIAGRAM IN THIS MANUAL AS A REFERENCE TOOL ONLY. NEITHER THE MANUFACTURER OR DISTRIBUTOR MAKES ANY REPRESENTATION OR WARRANTY OF ANY KIND TO THE BUYER THAT HE OR SHE IS QUALIFIED TO REPLACE ANY PARTS OF THE PRODUCT. IN FACT, THE MANUFACTURER AND/OR DISTRIBUTOR EXPRESSLY STATES THAT ALL REPAIRS AND PARTS REPLACEMENTS SHOULD BE UNDERTAKEN BY CERTIFIED AND LICENSED TECHNICIANS, AND NOT BY THE BUYER. THE BUYER ASSUMES ALL RISKS AND LIABILITY ARISING OUT OF HIS OR HER REPAIRS TO THE ORIGINAL PRODUCT OR REPLACEMENT PARTS THERETO, OR ARISING OUT OF HIS OR HER INSTALLATION OF REPLACEMENT PARTS THERETO.

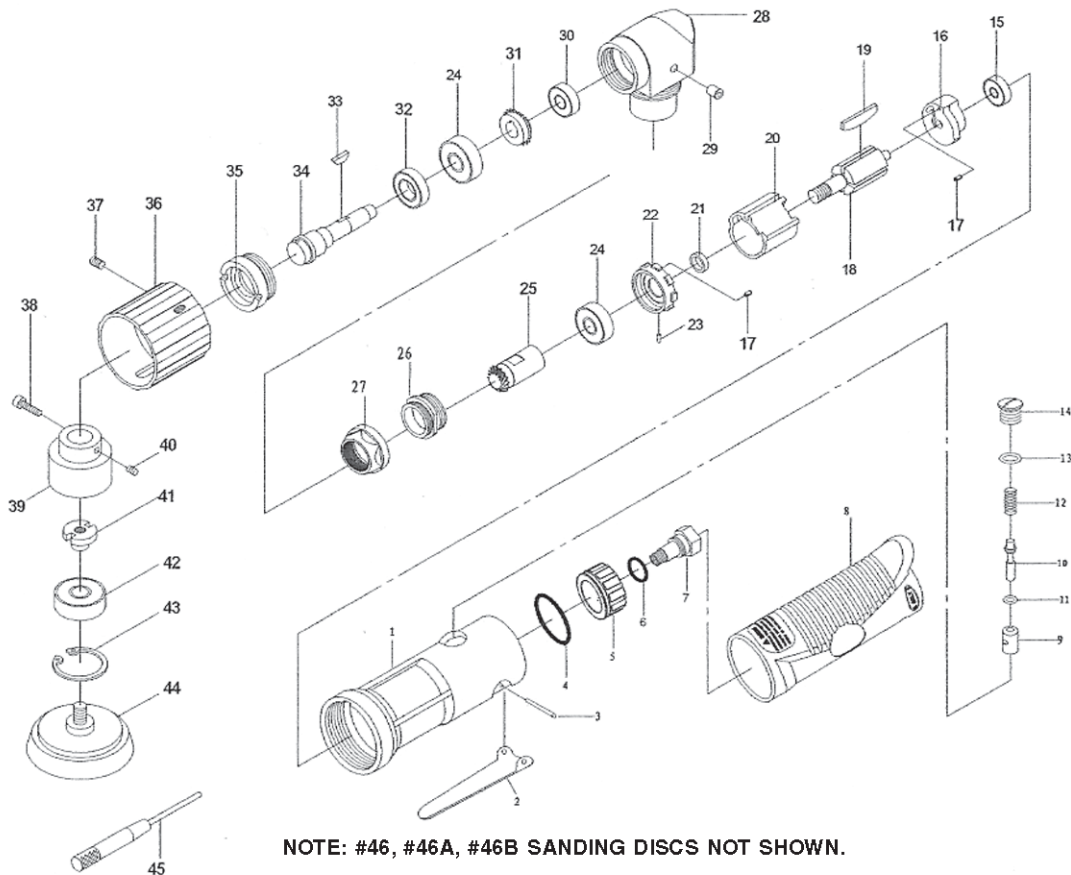
TROUBLESHOOTING

Problem	Possible Solution
Sanding Disc not revolving or revolving slowly.	<ol style="list-style-type: none"> 1. Squeeze harder on the Throttle. (See page 6.) 2. Make sure Air Compressor is set at 90 PSI. (See page 4.) 3. Check for leaks in Air Hose and all other compressed air connections. (See page 4.) 4. Remove Quick Connector. Check Air Filter in Housing for excessive debris build-up. If necessary, clean or replace Air Filter. (See page 5.) 5. Have a qualified service technician check the Air Sander for defects/damage.
Air Sander will not remove residue from the workpiece, even after repeated brief attempts.	<ol style="list-style-type: none"> 1. Use a coarser Sanding Disc. (See page 6.) 2. Do not continue sanding to avoid damaging work surface. Use another method to remove residue.

PARTS LIST AND ASSEMBLY DIAGRAM

Part #	Description	Qty.	Part #	Description	Qty.
1	Housing	1	25	Collet Holder	1
2	Throttle	1	26	Retainer	3
3	Pin	1	27	Housing Cap	1
4	O-Ring	1	28	Angle Head	1
5	Muffler	1	29	Oil Valve	1
6	O-Ring	1	30	Bearing	1
7	Air Inlet	1	31	Inclined Wheel Gear	1
8	Sleeve	1	32	Bearing	1
9	Valve Bushing	1	33	Woodruff Key	1
10	Pin	1	34	Spindle	1
11	O-Ring	1	35	Lock Nut	1
12	Spring	1	36	Drive Housing	1
13	O-Ring	1	37	Screw	1
14	Air Regulator	1	38	Screw	1
15	Bearing	1	39	Balancer	1
16	End Plate	1	40	Screw	1
17	Pin	2	41	Drive Spindle	1
18	Rotor	1	42	Bearing	1
19	Vane (Set of 4)	4	43	Retainer Ring	1
20	Cylinder	1	44	Pad (2")	1
21	Bushing	1	45	Wrench	1
22	Front Plate	1	46	Fine Sanding Disc	1
23	Pin	1	46A	Medium Sanding Disc	1
24	Bearing	2	46B	Coarse Sanding Disc	1
			47*	Bearing Set	1

* Includes: #15, #24, #30, #32, #42



NOTE:

Some parts are listed and shown for illustration purposes only, and are not available individually as replacement parts.

LIMITED 1 YEAR WARRANTY

Harbor Freight Tools Co. makes every effort to assure that its products meet high quality and durability standards, and warrants to the original purchaser that this product is free from defects in materials and workmanship for the period of one year from the date of purchase (90 days if used by a professional contractor or if used as rental equipment). This warranty does not apply to damage due directly or indirectly, to misuse, abuse, negligence or accidents, repairs or alterations outside our facilities, normal wear and tear, or to lack of maintenance. We shall in no event be liable for death, injuries to persons or property, or for incidental, contingent, special or consequential damages arising from the use of our product. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation of exclusion may not apply to you. THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS.

To take advantage of this warranty, the product or part must be returned to us with transportation charges prepaid. Proof of purchase date and an explanation of the complaint must accompany the merchandise. If our inspection verifies the defect, we will either repair or replace the product at our election or we may elect to refund the purchase price if we cannot readily and quickly provide you with a replacement. We will return repaired products at our expense, but if we determine there is no defect, or that the defect resulted from causes not within the scope of our warranty, then you must bear the cost of returning the product.

This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

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